Project Summary

csci205_final_project

Project Details

Members

- Chris Garcia
- Meiers Dixon
- Molly Yoder
- Tue Nhi Cao

Project Retrospective

What was your initial goal?

Our initial was to create a crossword for both education and games.

What did you achieve?

We achieved a crossword that generates dynamically and provides hints using AI.

What went well in the project?

What went well was teamwork and our level of dedication and willpower

What could be improved?

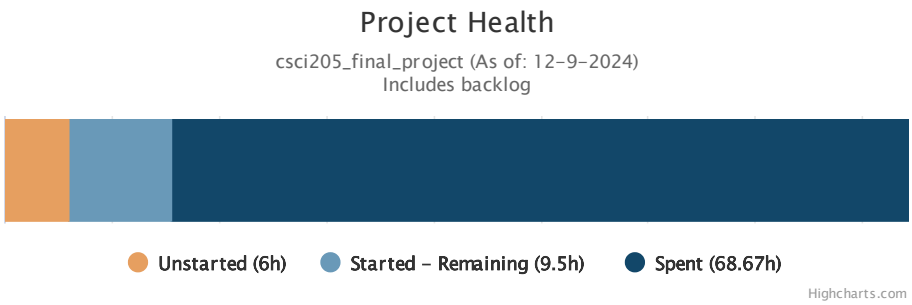
We could have improved our communication, it was shaky sometimes

What would you change if you did the project again?

It was hard to make realistic goals on a weekly basis--sometimes we stretched ourselves too thin and did not accomplish everything on target

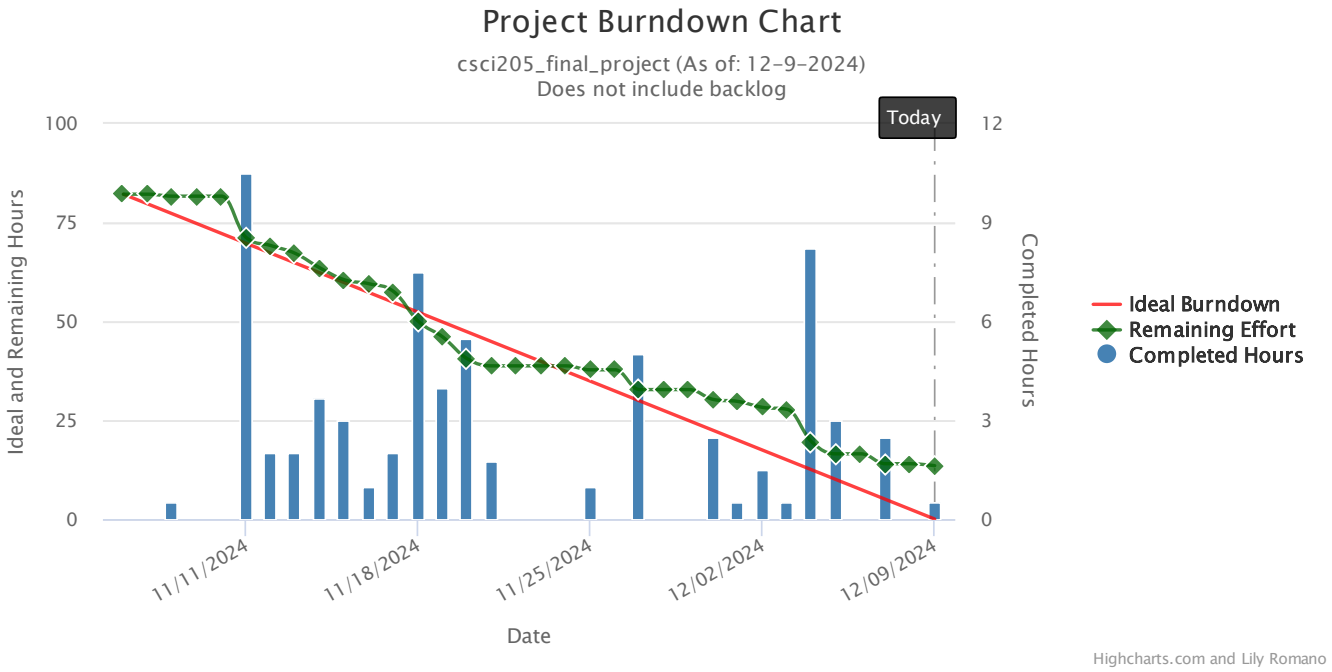
Charts

Health Bar



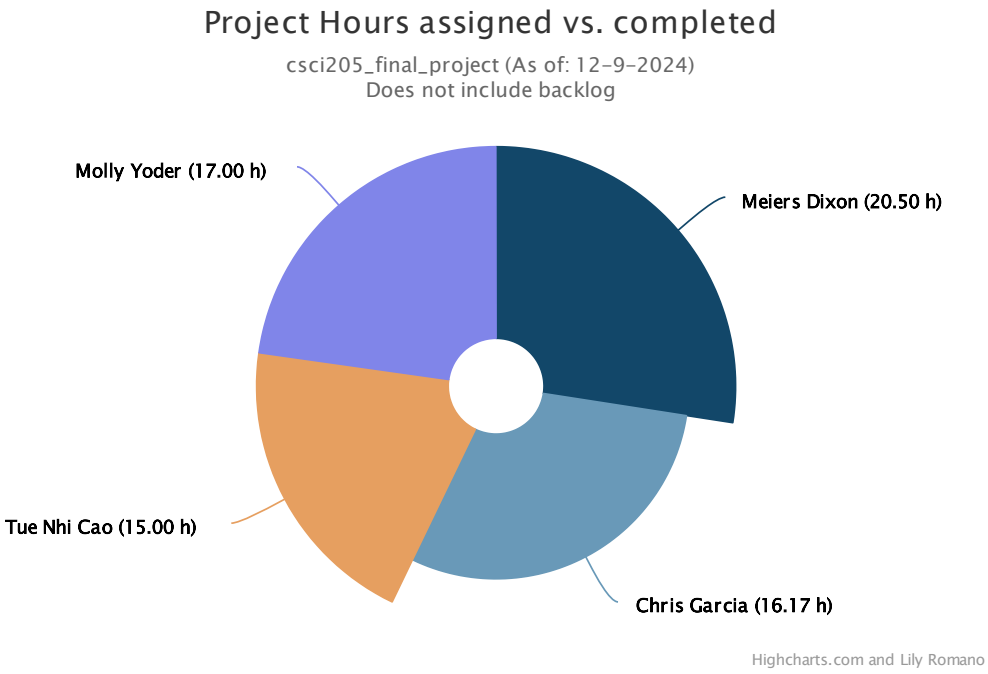
It looks like our Health Chart is pretty good, except that we have some unstarted work. This may be a result of being rushed in the end. There were some tasks that needed to be taken off that count as "unstarted," for example. Some others were not closed completely. This would not typically happen in a normal Sprint Review, as we could split the work into the next sprint.

Burndown Chart



Our completed hours seems a bit unorganized, but as a rule, our Remaining Effort and Ideal Burndown lines are on the same order. One reason for this might be that we were all still becoming accustomed to the system of logging our hours.

Assignee Chart



The chart reflects the fact that everyone is in the group completed approximately the same number of hours. Some members were more apt to complete certain types of tasks than others, and this is reflected in the chart.

Name	User Stories	Bugs	Tech. Tasks	Design Tasks	Spikes	Doc.
Chris Garcia	0	0	10.17	0	3	3
Meiers Dixon	5	0	15.5	0	0	0
Molly Yoder	0	0	12	0	0.5	4.5
Tue Nhi Cao	0	0	5.5	0	9.5	0

Sprints

Sprint 1

Dates:
11-6-2024 to 11-13-2024

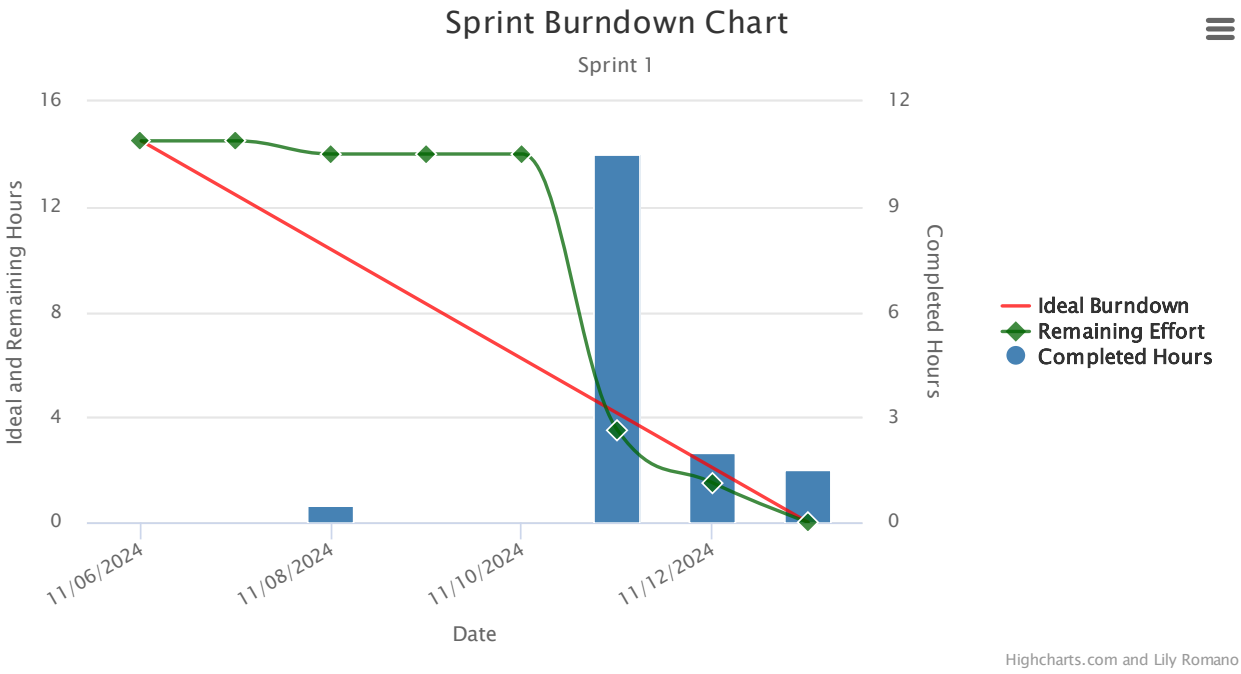
Review:
What went well in the sprint?
We did well working as a team to implement the necessary features and have a collective understanding of our goals for the product.

What could be improved?
Organization could be improved in terms of both the project as a whole and the

code itself.

Are you on track? What is your plan if not?
Overall, we are on track although we've hit a few bumps so far.

What will you improve on in the next sprint?
Breaking up/assigning tasks more equally and be more realistic about the estimated time for certain tasks.



Sprint 2

Dates:
11-13-2024 to 11-20-2024

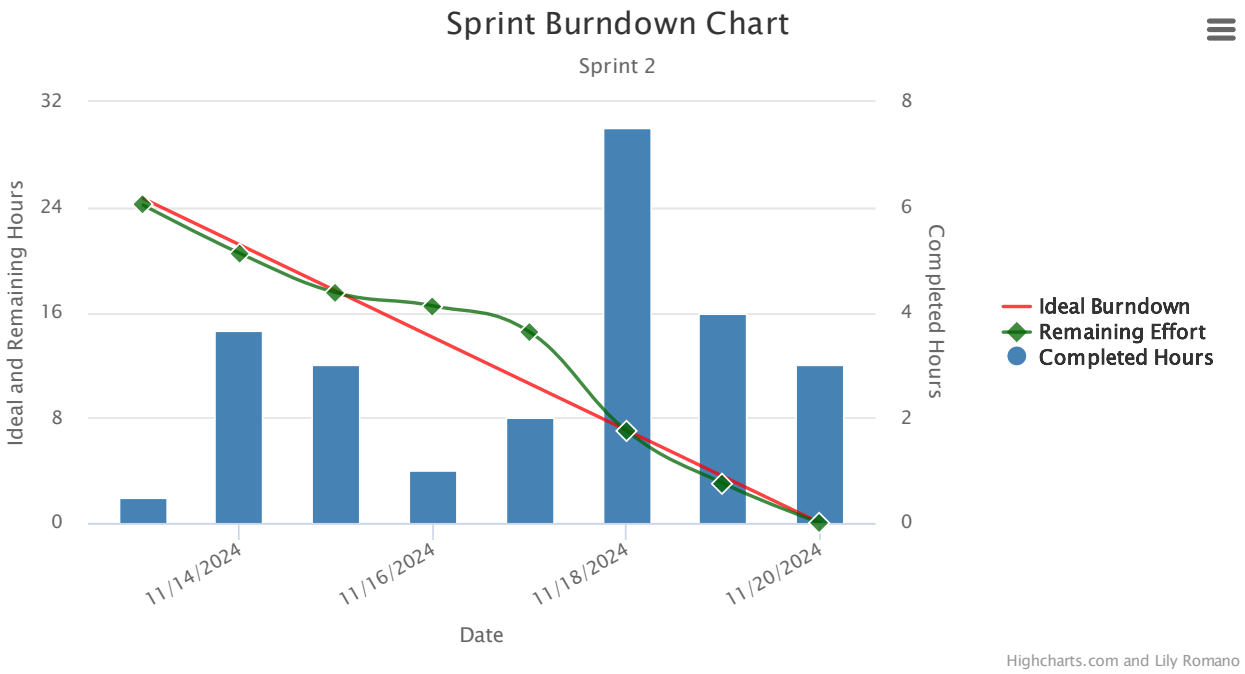
Goal:
Continue with research and implementation

Review:
What went well in the sprint?
We distributed the tasks so everyone was working on different areas which helped us develop different parts of the project.

What could be improved?
Our planning could be improved--we need more forecasting.

Are you on track? What is your plan if not?
For the most part, we are on track. Once again we have some small bumps.

What will you improve on in the next sprint?
We will do better documentation and communicate more.



Sprint 3

Dates:
11-20-2024 to 12-4-2024

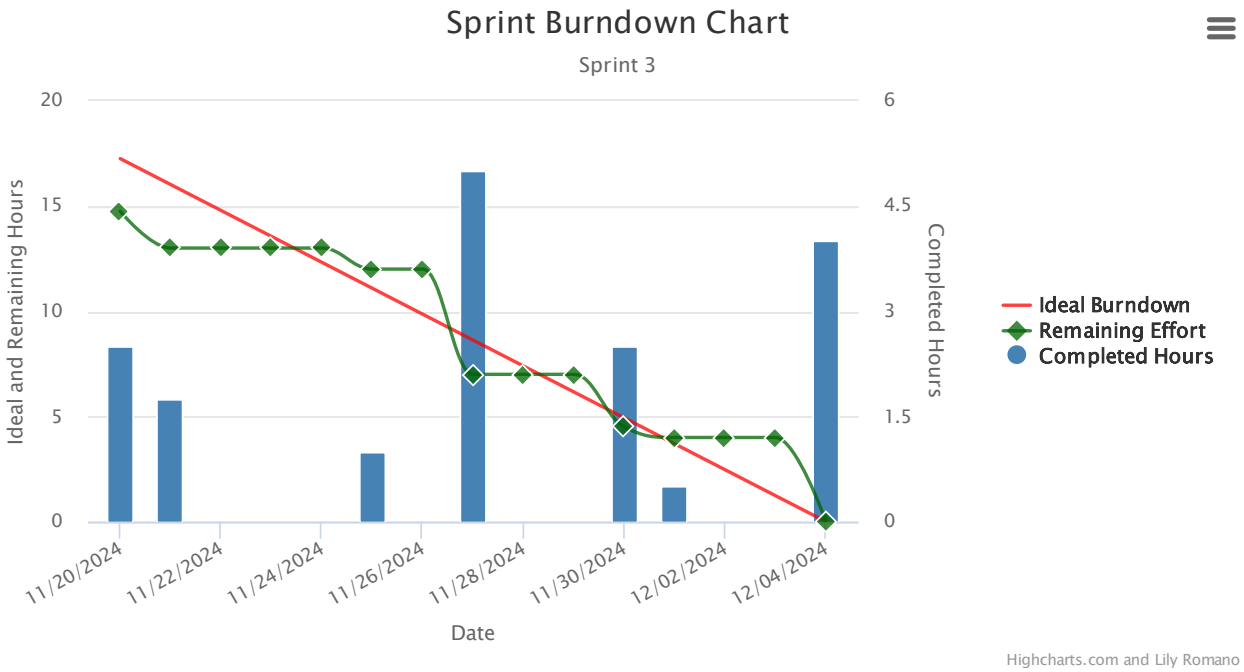
Goal:
Our goal is to get most of the application done in time for documentation and such

Review:
What went well in the sprint?
We all came together and combined everything. This resulted in a lot of progress.

What could be improved?
We could improve our efficiency

Are you on track? What is your plan if not?
We are slightly behind the track

What will you improve on in the next sprint?
We will improve our efficiency



Sprint 4

Dates:
12-4-2024 to 12-9-2024

Goal:
Our goal is to finish everything

Review:
What went well in the sprint?
We stayed in pace by completing the UI and working diligently on documentation

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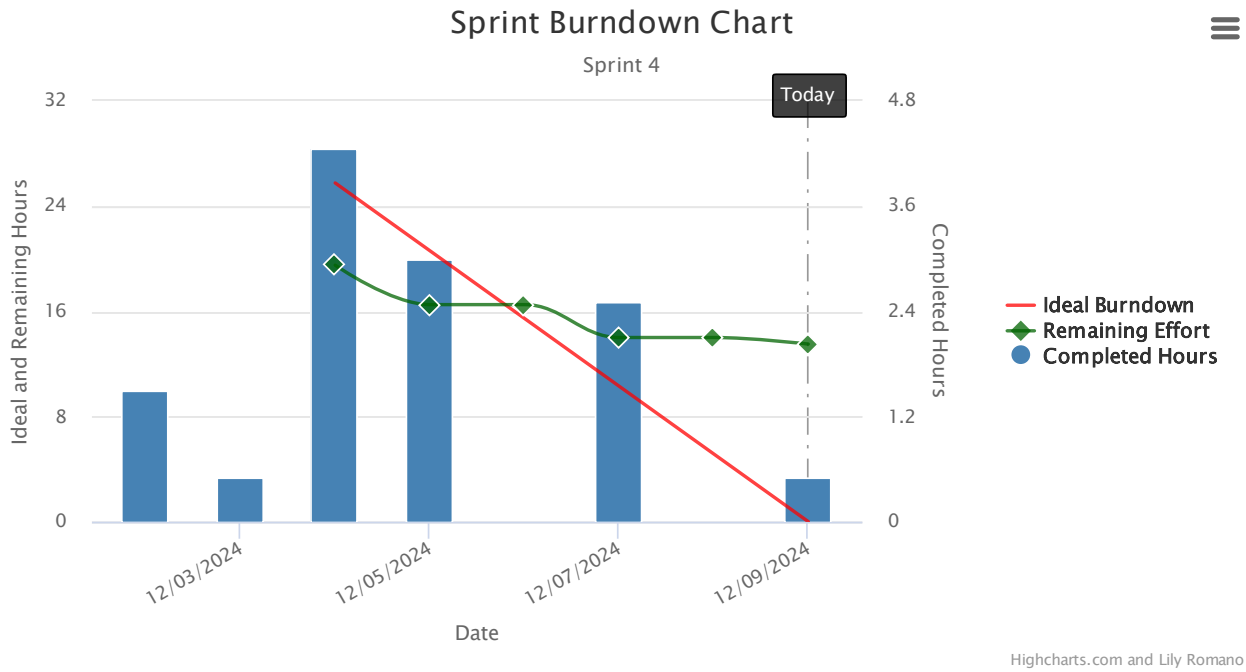
What could be improved?
We could have documented more tasks.

If you were to continue the project, what would you improve on in the next sprint?
N/A



Personas

Craig Gonzales

Quote

"I like to cause trouble"

Narrative

This person likes to break things, especially code. They will type random symbol and characters to check error handleing

Mina De Crom

Quote

"I love my students!"

Narrative

Mina is a teacher who wants to create fun crosswords for her elementary school children.

Alexandra Peters

Quote

"I like brain teasers and puzzles and I am bored a lot"

Narrative

Wants to create a crossword puzzle to entertain themselves.

Hans-Uwe Färber

Quote

I enjoy solving puzzles on paper!

Narrative

Hans wants to generate a crossword that he can save off and print to solve on paper. He does not care much for an interactive game application.

Cédric Morin

Quote

I love playing brain games online!

Narrative

Cedric loves to play NYT-style games online, and hates that he can only play one a day through NYT. He's been looking for an application that will allow him to play a (seemingly) unlimited number of games on his laptop.

Table of Work

Search:

Showing 1 to 26 of 26 entries

Title	Type	Est.	Spent
Opened (1)		2 h	0
Backlog (1)		2 h	0
Add presentation	Documentation	2 h	0
Closed (25)		82 h, 10 m	0
Sprint 1 (6)		14 h, 30 m	14 h, 30 m
Create GUI	Technical Task	7 h, 30 m	7 h, 30 m
Figure out AI stuff	Spike	2 h	2 h
Generate Structure of the Crossword Algorithm	Technical Task	1 h	1 h
Implement Word Database	Technical Task	30 m	30 m
Research Crossword Algorithms	Spike	30 m	30 m
Research Word Storage and Databases	Spike	3 h	3 h
Sprint 2 (7)		24 h, 40 m	24 h, 40 m
Check error handling For user input	User Story	1 h	1 h
Create a method to call AI to generate hint	Technical Task	5 h, 30 m	5 h, 30 m
Create Simple Interactive Interface	Technical Task	7 h, 40 m	7 h, 40 m
Create tests for crossword puzzle generation	Technical Task	2 h, 15 m	2 h, 15 m
Implement Crossword Generation Algorithm	Technical Task	4 h, 15 m	4 h, 15 m
Research Gemini (how to call API)	Spike	2 h	2 h
Swap the location of the hint box and the input container	Technical Task	2 h	2 h
Sprint 3 (6)		17 h, 15 m	0
Check error handling For user input	User Story	4 h	4 h
Create Simple Interactive Interface	Technical Task	4 h	4 h
Create tests for crossword puzzle generation	Technical Task	3 h, 45 m	3 h, 45 m
Finish integrate API to generate hint of word	Spike	4 h	4 h

Title	Type	Est.	Spent
Make button to toggle AI_hints vs User_hints	User Story	0	0
Research Groq API	Spike	1 h, 30 m	1 h, 30 m
Sprint 4 (6)		25 h, 45 m	0
Complete UML	Documentation	4 h	4 h
Create Automatic Crossword	Technical Task	4 h	0
Design Manual	Documentation	4 h	30 m
Index words for hints	Technical Task	45 m	45 m
Take the puzzle generation function and build the gui elements f	Technical Task	8 h	4 h
User Manual	Documentation	5 h	3 h

Daily Scrum

Daily Scrum Notes

- Finished assigning tasks for Sprint 1
- Outlined basic class structure
- Started UML Diagrams
- Goals:
  - Chris looking for ways to store words
  - Molly researching Crossword algorithms
  - Nhi Researching AI possibilities
  - Meiers working on GUI
- No challenges yet

11/15

- Working on implementation, planning pretty much complete
- Goals:
  - Molly implementing algorithm to build puzzle given a list of words
  - Chris is working on refactoring the word generator and reserach the multiple page interface

    - Nhi is continuing to work on the AI and is meeting with the prof. today to discuss that
- Learning SceneBuilder is a challenge for some so far

11/18

- We did more interactive GUI.
- We also did some super cool testing and algorithm implementation
- Also more research for AI. Also implemented the method to call the AI via API key

11/20 Chris has set up the buttons which is good. I think Molly is still working on the Algorithm, but is making progress. I have switched the GUI location of the hint box and the text entry box. Nhi has been working on making the method for the API call.

11/21 Meiers and Chris are doing GUI, meiers still needs to finish jam11 :(, Nhi is doing API call with GRO, Molly is doing the algorithm still and chris is doing JavaScene builder

11/22 Meiers is going to do jam11 over the weekend, I think everyone else is still doing the same thing. Plan is to get a working mvp done over the break. If we need anything, we will be sure to call eachother

12/2 Okay we have made some pretty good progress over break. The algorithm for creating the structure of the puzzle has been completed by Molly and pushed, and I worked on making a pseudocode skeleton with the methods (methods supplied by both Molly and Nhi). Nhi finished her method which uses AI, so we can also call that. Chris removed the old code for the GUI and skimmed the docs and made a shared drive.

12/5 Today was Thursday and We did not to too much since the last check in. Chris refactored some code though, so that is good, and we decided to meet to make the video on 12/15, Also I realized that the puzzle does not need to have any text input, just blank boxes and a print out button

12/9 Molly worked on our presentation and getting all the diagrams into the Design Manual. Nhi is also working on the Design Manual. Meiers is ironing out errors in the crossword that generates on-screen. Chris is working on the presentation and contributing to the Design Manual